



Asia-Pacific Legal Metrology Forum

MEDEA: Metrology Enabling Developing Economies in Asia

APLMF Work Package 1 – Concept

This paper provides a context for this work package and sets out how it will be delivered over the next 4 years.

Background

The Asia-Pacific region is characterised by rapid economic growth of certain economies and the development of new economic zones. At the same time, developing economies face challenges which reduce their competitiveness because they do not have access to an internationally recognised conformity assessment system. This results in new non-tariff barriers to trade for the developing economies. Supporting developing economies to adopt a ‘quality infrastructure’ will remove technical barriers to trade and contribute to the creation of a common regulatory framework within the region.

MEDEA Project

MEDEA is a four year project managed by Physikalisch Technische Bundesanstalt (PTB) and funded by the German Federal Ministry for Economic Development and Cooperation (BMZ) which aims to foster and further develop the capabilities of the Asia Pacific Metrology Programme (APMP) and the Asia Pacific Legal Metrology Forum (APLMF) to support developing economies in the Asia-Pacific region.

The project aims to improve the ability of the regional metrology specialist networks in Asia to:

- promote metrology systems within developing economies; and
- strengthen the metrology systems/infrastructure of their respective members from developing economies.

The project objectives and the expected outputs were developed together with the APMP and APLMF and are binding.

Outputs	Output Statements
Output A	APMP and APLMF have developed and implemented capacity development instruments geared to the needs of developing economies.
Output B	NMIs and LMAs (Legal Metrology Authorities) from developing economies are able to meet the criteria for international recognition and to implement international good practices.
Output C	The mutual support and cooperation between the members of APMP and APLMF for the development of metrology systems in developing economies has been strengthened.
Output D	The cooperation between APMP and APLMF as well as the cooperation with other regional networks has increased.

A Coordination Committee consisting of three APLMF and three APMP members plus the PTB project coordinator oversees the planning and the implementation of the MEDEA project.

Taking into account the project objectives and expected outputs an operational plan was developed. This plan is based on the outcome of a joint APMP and APLMF planning workshop that took place in Jakarta in May 2014. The operational plan was further revised by the Coordination Committee of the project. It now includes ten different work packages. The Coordination Committee agreed that the first step in delivering a work package was to develop a clear concept which could be shared with all member economies.

The Coordination Committee developed the following criteria to select activities:

Essential criteria:

1. Comply with the project framework (Objective and Expected Outputs).
2. Target Group: Developing Economies from South Asia, Southeast Asia, East Asia and Pacific Islands
3. Focus on regional cooperation (no direct support to one economy, e.g. equipment)

Desirable criteria:

1. Focus on long-lasting systems and schemes
2. Activities integrated into national strategies
3. Focus on progressive training programs (no stand-alone activities)
4. Activity covers more than one indicator in the overall project
5. Relevance according to regional capability survey

Concept for APLMF Work Package 1 - Basic and Advanced Courses in Legal Metrology

Work Package committee members: Marian Haire (Chair), Stephen O’Brien, Tsuoyoshi Matsumato and Guo Su.

This work package will deliver 11 training courses over 4 years to developing economies participating in the MEDEA program who have provided the required data towards the Regional capability Survey. The budget to deliver 11 training courses will be approximately \$500,000 US. The first phase will be to deliver the basic course and towards the end of the program the advanced course will be offered. All training will be conducted in English.

Basic Courses	Advanced Courses
Verification of NAWI : supermarket scales	Verification of weighbridges
Verification of Standards: mass, volume, length	Software examination
Prepackaged goods	Verification of CNG using coriolis meters (bulk)
Verification of Fuel dispensers for petroleum products (petrol and diesel)	Verification of Bulk Flow Meters for petrol and diesel
Verification of Rice Moisture	Verification of Fuel dispensers for LPG
	Verification of Taxi meter

Approximately 20 participants will attend each training course that contains a practical component. More participants can be accepted for training with no practical component. Host economies will be allowed to have up to 10 additional people attend as observers. For

safety reasons the number should never exceed 30 people during practical sessions. Host economies need to have access to the equipment required for the practical component of the training course.

APLMF will distribute an invitation to all member economies at least 3 months before each scheduled training course. PTB will also distribute the same invitation to non APLMF economies that could benefit from attendance at each training course. Participants from developing economies will receive an economy return flight, free accommodation and a daily allowance from PTB.

To be accepted into the program participants will complete an application form and demonstrate their ability against the following selection criteria:

- practical recent experience related to the topic;
- ability to to implement the training in their economy within 3 months;
- willingness to provide a written report signed by the head of their organisation to APLMF Secretariat at 6 months and 12 months intervals after the training explaining how their implementation plan is progressing willingness to report against the Metrology Capacity Survey distributed by the APLMF Secretariat for the topic in question; and
- they are supported by the head of their organisation

Generally a maximum of 2 participants will be accepted from any one economy. Acceptance will be based on the ranking of participants by the Secretariat, and the Chair of the Working Group on training coordination. Advice will also be sought from the chair of the responsible Working Group if necessary.

The target group for all courses are - trade measurement officers who are involved in the testing of measuring instruments or prepackaged goods in the market place. They need to be in a position to implement change.

APLMF will invite member economies to nominate as hosts for each training program. Ideally events will be hosted by developing economies; however, there may be times when it is best to hold a course in a developed economy. Host economies will be reimbursed all expenses at the training event including venue, food, technical equipment, transportation, materials etc. by PTB.

APLMF member economies will be invited to volunteer as trainers to deliver the training courses within this program. Two is maximum number of trainers that will be funded. Trainers will be selected from both developed and emerging economies within the region. If no trainer is available within APLMF a trainer can be sourced from outside APLMF. PTB will provide trainers with an economy return flight ticket, free accommodation and a daily allowance. No compensation or honorarium will be paid.

The APLMF Secretariat will be represented at all training courses and will have the following responsibilities:

- lead the opening session where a representative from each economy will present a report using the Metrology Capacity Survey to demonstrate their economies capacity for the topic under discussion. They will be there to ask pertinent questions that allow validation of the Metrology Capacity Survey.

- lead the closing session where participants will use the Metrology Capacity Survey to develop implementation plans (for the topic) that they will use when they return to their own economy
- carry out a formal written evaluation where all participants provide a return and the comments are collated
- support trainers to develop final report on the training activity
- develop a resource that records the key points of the training that will be available on the APLMF website

Trainers will be required to:

- provide a list of test procedure they feel are essential and desirable for the verification of particular instruments. These will be validated through a survey and the APLMF meetings over time. They will become the approved APLMF test procedures.
- include a section on traceability in the training program
- include a list of relevant resources available within the region
- provide a report on each activity to the Secretariat of APLMF who will collate all reports and use them to validate the Metrology Capability Survey. Each report should include:
 - A brief description of the program
 - The list of participants
 - Highlights/ Success Stories
 - Lessons Learned/ what should be improved in the future
 - Follow-up actions



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Please complete this form and return it to the APLMF Secretariat by 10 October 2014.

Economy: _____

The following table sets out the training courses to be delivered under the MEDEA project. Economies are invited to volunteer as hosts or to supply trainers.

All suggestions will be discussed at the APLMF 21 meeting in Wellington, N.Z. in November where the program will be confirmed. These courses will be delivered over the period 2015-17 with approximately 4 courses delivered each year.

Basic Courses	Host economy	Names of nominated trainers	Suggested Date
Verification of NAWI: supermarket scales			
Verification of Standards: mass, volume, length			
Prepackaged goods			
Verification of Fuel dispensers for petroleum products (petrol and diesel)			
Verification of Rice Moisture			
Advanced Courses			
Verification of weighbridges			
Soft ware examination			
Verification of CNG using coriolis meters (bulk)			
Verification of Bulk Flow Meters for petrol and diesel			
Verification of Fuel dispensers for LPG			
Verification of Taxi meter			